CMOS CAMERA MODULES

your BEST camera module partner

KLT-A4K-OV2680-3025

OmniVision OV2680 MIPI Interface Foco Fixo 2MP Módulo de Câmera



Módulo de câmara No.	KLT-A4K-OV2680-3025
Sensor de imagem	OV2680
EFL	2.95 mm
F.NO	2.8
Pixel	1616 x 1216
Ângulo de visão	60°
Tipo de lente	1/5 polegada
Dimensões da lente	6.50 x 6.50 x 4.80 mm
Tamanho do Módulo	6.60 x 15.05 mm
Tipo de Módulo	Foco Fixo
Interface	MIPI



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OV2680/0V2685 2MP product brief



Cost-Effective, Low-Power 2-Megapixel Sensors for Feature Phones, Smartphones and Tablets

available in a lead-free package

The OV2680 (RAW) and OV2685 (SoC) are costeffective, low-power 2-megapixel CameraChip[™] sensors for feature phones and front-facing camera applications in smartphones and tablets. The 1/5-inch sensors leverage a 1.75-micron OmniPixel3-HS[™] pixel to deliver high quality 2-megapixel images and video at 30 frames per second (fps). The sensors' high sensitivity and low dark current deliver exceptional image and video quality, even in low-light conditions.

The OV2680 and OV2685 are cost-effective upgrade solutions to the OV2659 & OV2675 CameraChip sensors with a smaller footprint and smaller die size.

Compared to previous generations, the OV2680 and OV2685 offer improved image quality with the latest OmniPixel3-HS pixel architecture. Using OmniVision's proprietary sensor technology, both sensors reduce or eliminate common lighting and electrical sources of image contamination, such as fixed pattern noise, smearing, etc., to produce a clean, stable, color image.

The OV2680 and OV2685 both feature a single-lane MIPI interface, which allows for a simple design with modern basebands.

Find out more at www.ovt.com.



Applications

- Ultrabooks
- PC Multimedia
- Games
- Home Entertainment
- Tablets

Cellular and Picture Phones

Toys

Product Features

- MIPI and D-PHY specification (contains high sensitivity and low dark current one clock lane) with a maximum of 750 Mbps data transfer rate
- support for output formats:
 OV2680: 10-bit RAW RGB OV2685: 10-bit RAW RGB, 8-bit YUV
- programmable controls for frame rate, mirror and flip, cropping, and windowing auto black level calibration
- low operating voltage and low power consumption for embedded portable applications
- supports global analog gain

- for low-light conditions
- supports free-running clock and gated clock
- supports down-sampling and binning mode
- defect correction capability supports horizontal and vertical subsampling

OV2680/OV2685

- OV02680-H47A (color, lead-free, 47-pin CSP5)
- OV02685-H53A (color, lead-free, 53-pin CSP5)

Product Specifications

- active array size: 1616 × 1216
- power supply: - 0V2680 core: 1.58V ±3% - OV2685 core: 1.7 - 1.9V - analog: 2.6 - 3.0V - I/O: 1.7 - 3.0V
- power requirements: OV2680 active: 123 mW 0V2685 active: 259 mW - XSHUTDN: <1 μA
- temperature range:
 operating: -30°C to +85°C junction temperature stable image: 0°C to +50°C junction temperature

output formats: 10-bit RGB RAW, 8-bit YUV (0V2685)

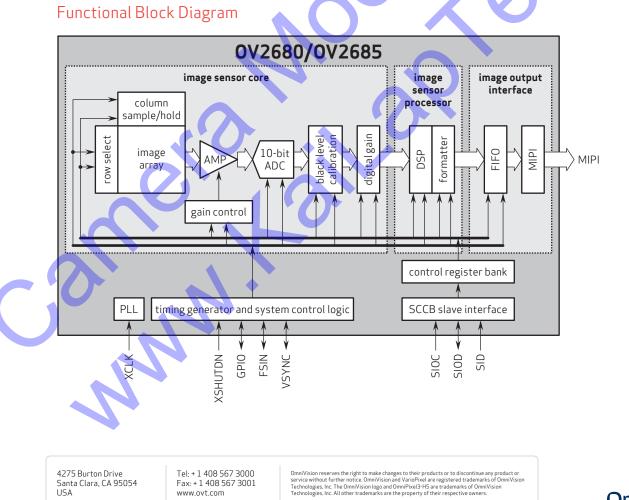
■ lens chief ray angle: 28.5° non-linear

- input clock frequency: 6 27 MHz
- maximum image transfer rate: 30 fps
- scan mode: progressive maximum exposure interval:

lens size: 1/5"

- 1 frame 4 t_{ROW} pixel size: 1.75 μm x 1.75 μm
- 🔳 image area: 2840 μm x 2150 μm
- package/die dimensions:
 OV2680 CSP5: 4180 μm x 3480 μm
 OV2685 CSP5: 4454 μm x 4014 μm

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USA